

## **ABSTRACT**

### **NEUROTOXIC AMINO ACID OR NEUROTOXIC DERIVATIVE THEREOF ASSOCIATED WITH NEUROLOGICAL DISORDERS**

Methods for screening for neurological disorders are disclosed. Specifically, methods are disclosed for screening for neurological disorders in a subject by analyzing a tissue sample obtained from the subject for the presence of elevated levels of neurotoxic amino acids or neurotoxic derivatives thereof associated with neurological disorders. In particular, methods are disclosed for diagnosing a neurological disorder in a subject, or predicting the likelihood of developing a neurological disorder in a subject, by determining the levels of  $\beta$ -N-methylamino-L-alanine (BMAA) in a tissue sample obtained from the subject. Methods for screening for environmental factors associated with neurological disorders are disclosed. Methods for inhibiting, treating or preventing neurological disorders are disclosed.